

## **A.I.D. EVALUATION HIGHLIGHTS NO. 26**

EXPORT PROMOTION AND INVESTMENT IN INDIA

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### **SUMMARY**

India was the largest exporter in the developing world during the 1950s. But in the succeeding decades, India's highly antiexport policy regime reduced the country to a minor player among Asian exporters of manufactures. Other countries had taken advantage of export opportunities that India had ignored and learned the skills needed to become important players in the international market. Despite some recent liberalization in India's trade policies, the Indian export sector faces a tremendous challenge if it hopes to compete.

The Center for Development Information and Evaluation (CDIE) conducted a case study of export promotion and investment in India as part of a broader assessment of U.S. Agency for International Development's (USAID) experience with export and investment promotion services worldwide. The assessment focused on several questions: Is export success simply a matter of appropriate macroeconomic policy, or can export promotion speed the process? If export promotion is a useful tool, what types of interventions are most appropriate, and what is the economic rationale for such interventions?

The India case study examines export promotion within a policy context strongly biased against exports. The study assesses the range and effectiveness of export promotion services in India from the point of view of exporting firms examining what services were used, their sources and effects, and who firms credited for their export success. The study also reviewed the impact of the USAID project on the performance of the assisted firms.

USAID is a marginal donor in India, contributing less than 1 percent of all donor assistance. As a result, its potential for influencing government policy is extremely limited. Nevertheless, USAID's Program for the Advancement of Commercial Technology (PACT) has been very successful in strengthening linkages between India's commercial technology and its research capabilities. Most important the success of PACT showed that linkages to international technology via links to firms in the United States were essential, not harmful, to national research and development (R&D). PACT demonstrated that trade liberalization could promote exports both directly and through spillover effects on other sectors of the economy. In addition, the project helped promote the creation of a venture capital industry in India and reinforced the competence of Indian entrepreneurs.

# BACKGROUND

## The Policy Environment and Export Growth

India began to industrialize earlier than most developing countries. The first Indian steel mill was built in 1912. In 1914, India had the world's fourth largest cotton textile industry and the second largest jute manufacturing industry. By 1950, steel production was 1.5 million tons—not only greater than that of all other developing countries, but also greater than that of Australia and Sweden and not far behind Japan. From independence onward, however, India adopted an inward-oriented development strategy. Government quantitative controls on imports and on foreign exchange use effectively handed control over types and quantities of imports to government planners rather than the marketplace. At the same time, the Government used planning for domestic resource allocation. Among democratic countries, India was the closest imitator of the Soviet planning model, with a succession of 5-year plans beginning in 1951.

From the time of the Second Plan (1956-1961), India's economic policy focused on government control of private investment and foreign exchange. The plans provided aggregate projections of required levels of output by sector. The planners then used these projections to generate required levels of investment in each sector and granted firms permission to make capital investments on this basis. Without prior government approval, capital investment was not allowed.

The rationale for this approach was that capital was extremely scarce in India. In practice, the policy had the opposite effect. Indian investment programming proved extremely wasteful of capital. It has taken nearly twice as much capital to produce a given increase in output in India as in many developing countries. Statistics also suggest that industry is highly capital intensive and plagued by substantial excess capacity. An index for 30 industries shows capacity utilization of 75 percent in the early 1970s, falling steadily to 66 percent in 1984. This excess capacity is a curious phenomenon for a country where government policy aims to control investment explicitly to prevent the creation of excess capacity.

Capacity controls have also had a dampening effect on exports since firms were assured of freedom from new competitors as long as excess capacity existed in the sector. Using exports to reach full capacity carried the risk that the Government would approve investment applications by competitors, thereby reducing the firm's profits on its domestic production. Not surprisingly, India's exports fell from about 7 percent of the gross domestic product (GDP) in 1950 to about 4 percent during the 1960s and 1970s (see figure), before recovering to 5.5 percent in the 1980s.

India has maintained high, and growing, levels of investment. By developing country standards, the national savings rate is quite high at 20 percent and the investment to GDP ratio rose from 12 percent in the 1960s to 18 percent in the 1970s and to 24 percent in the late 1980s. The major factor in the relatively slow growth of Indian GDP has always been the inefficiency of investment rather than its level. The major policy challenge facing India is productivity. With

improved productivity, India's capacity to save would allow growth of 9-10 percent a year.

### **The Private Sector and Constraints to Export-Led Growth**

With its huge internal market and long period of industrial development, India has a vibrant private sector. However, companies often face insurmountable hurdles when they attempt to export. Government controls on imports and foreign exchange are daunting to any company that wants to compete in any but the most routine and well-established markets.

After several decades of rigid controls, the Government liberalized trade policy somewhat during the 1980s. The process was slow and tentative, however. By 1991, the country still had average tariff levels exceeding 100 percent, most imports subject to government licensing approval, import restrictions on significant number of goods, and cumbersome foreign exchange controls that limited access to imports. In sum, the liberalization process was very limited.

Moreover, Indian exporters still face tough governmental constraints. Not only must companies surrender all export proceeds to the central bank, but they must also obtain approval to make sales trips abroad and reimburse foreign buyers for damaged goods, for foreign commissions, and for market research assistance. Firms complained that central bank approval for almost any aspect of foreign exchange expenditure could take up to 6 months. Such time lags made it impossible for firms to compete in dynamic or emerging export sectors. Import controls also discouraged exports. For example, imports of machinery or intermediate goods required government approval, which could involve months per transaction. Several firms reported that their exports were not competitive internationally because of the poor quality of some of the inputs and restrictions on imported equivalents. Certain products, such as paper, glass, some textiles, and specialty steels, did not meet international quality standards, posing major obstacles for exports that depended on them.

## **USAID'S ASSISTANCE APPROACH**

In India, USAID's approach was to select narrow sectors where it could achieve significant payoffs. The PACT project, which USAID began in 1985, aimed at improving the linkage between India's substantial research capabilities and intellectual capital on the one hand, and commercial technology on the other. It provided \$15 million in conditional grants to support joint research and development projects by Indian and U.S. firms. The project provided up to \$500,000 to individual subprojects to be matched by the joint venture partners. About 30 subprojects had been approved at the time of the review, of which 11 were primarily for exports. CDIE interviewed all the exporting firms.

PACT was established as a unit of the Industrial Credit and Investment Corporation of India (ICICI), an extremely well-managed lending institution. The project took as its rationale the idea that firms—both manufacturing firms and financial intermediaries—misperceive the

opportunities for profits from additional research and development. The expectation of the PACT designers was that the project would demonstrate the feasibility of such R&D, which would then stimulate two developments: additional research by manufacturing firms, particularly joint research with foreign firms, and the creation of an active private market for R&D financing.

Although PACT did not set out specifically to promote export products developed under the project, an export rationale for the project could easily be conceptualized. India is clearly a foreign-exchange constrained economy, where the shadow price of foreign exchange is higher than the price set by the Government. (The Government uses exchange controls extensively, and the price of the dollar in the active black market is typically 20 percent higher than the official exchange rate.) Thus, the social value of export earnings is higher than the private returns to the firm, so some level of subsidy—such as the grants for R&D under the PACT project—is socially desirable.

## FINDINGS

### Indian Firms and Export Services

#### *The Export Services Market*

The evaluation team asked exporting firms what kinds of services they received and from whom, and which of these services they considered most valuable in helping them to export.

*Services used.* More than one-half of the surveyed firms used foreign market information, technical assistance in production, buyer contacts, and trade shows. At least one-quarter of the firms believed that the service had a material impact on their export success. With a few exceptions, the most widely used services also tended to be the most valued.

*Sources of services.* The bulk of valued services came from business dealings—44 percent from foreign partners of the Indian firm and another 19 percent from suppliers or buyers. External donors, government sources, and the Indian Government provided another 15 percent of valued services. The remaining 7 percent came from other private sources, either for pay (e.g., consulting firms) or not for pay (e.g., chambers of commerce). The importance attributed to different sources varied with the type of service. Firms that used government-provided services found them helpful in two areas—trade shows, where 75 percent of users found the service helpful, and government approvals, where 50 percent of the firms found the service useful. Despite the relatively high rating, only 10 percent of all firms surveyed used a government source for the two services.

*Credit for export success.* The survey also asked each firm to distribute credit for its export success among its own efforts and those of other institutions. The table shows the results

of this query. The low rating given to Indian Government agencies is striking given India's vast number of government institutions, organizations, and procedures aimed at promoting exports. These include export promotion councils (joint government and private organizations in each of about 40 export sectors), Indian embassies abroad, the National Technical Standards Department, the Ministry of Commerce, the Trade Fairs Authority, the Trade Development Agency, and the Export-Import Bank. Few developing countries have as complete a set. Most exporters received some services from one or more of these organizations. Most were required to belong to the appropriate export promotion council, to which they had to contribute based on their exports. In most cases, firms attached minimal value to these services. In fact, with the exception of the Export-Import Bank, these government institutions were held in very low esteem.

Table

### *Characteristics of Exporting Firms*

India has a number of highly successful exporters and many other firms that expect a dramatic increase in their exports over the next several years. These firms are mainly from the high-technology sectors, such as computer, electronics, and biotechnology, where the Government has moved farthest to eliminate barriers to international trade. Most successful exporters worked extensively with a foreign company or with a specialized consulting firm as a source of technical assistance for improved production, as a source of market information, or as partners.

Many companies outside the dynamic sectors want to export but are profoundly ignorant of how to link with the international marketplace. In many cases, they admitted that their product would not meet international quality standards largely because government import restrictions forced them to use inferior inputs.

Most companies want to link up with foreign firms. Many firms had used Indian embassies to obtain lists of potential foreign buyers, but with few results. One consulting firm told the evaluation team that any large U.S. company could expect to receive a letter a day from an Indian company seeking sales. Despite such interest, most Indian companies are simply unable to provide goods of required quality at world market prices. For these firms, the binding constraint is not lack of contact with foreign markets, but the firms' incapacity on the supply side. Export-oriented units (firms that export 100 percent of their output and thereby acquire special access to imports) and export processing zones (EPZs) do not meet international standards. They suffer from the same excessive government regulation and lack of user orientation that is typical of government-owned zones in other countries.

### *The Venture Capital Market*

The evaluation team interviewed service providers in one subsector—the venture capital market. Prior to PACT India did not have an organized venture capital industry. But within 5 years nine such firms had formed. PACT aimed at promoting the venture finance sector as a

means of promoting commercial R&D. Venture capital providers typically fund startup firms or relatively new firms that want to dramatically expand their operations. While venture capital in developed countries typically finances operations needing further product development, the R&D projects funded by PACT tend to focus on products that are usually closer to commercialization.

PACT's impact on the venture capital sector was indirect. Most people interviewed in other venture capital institutions were either unaware of or only vaguely familiar with PACT. However, they did know of the Technology Development Investment Company of India (TDICI)—a venture capital affiliate established by ICICI several years after PACT was established. Interviews strongly suggest that PACT demonstrated a demand for venture capital financing. Thus, PACT stimulated TDICI, and TDICI was the model that influenced most other venture capital institutions.

The Indian financial sector is extremely sophisticated and willing to move into new areas, such as venture capital, when government policy permits it. ICICI is one of the best in this regard. India's financial sector was underdeveloped because of government restrictions. But since PACT's creation, government policy has moved in the proper direction.

## **The Pact Project**

*Impact on venture capital market.* PACT firms placed a much higher value on joint R&D after participating in the PACT-supported activity than non-PACT firms. The first commercializations of PACT technologies only began in mid-1991, so it is still too early to expect PACT to have influenced the broader market. Again, the lack of joint venture activities in R&D was the result of restrictive government policy.

*Export performance of USAID-assisted firms.* The PACT firms for which data were available increased their exports significantly faster than did either unassisted firms or Indian firms in general. The nine PACT firms with commercial sales boosted exports sevenfold over the last 5 years, and the seven firms able to project over the next 5 years expected an eightfold increase.

*Rate of return on USAID's investment.* Although sufficient data are not yet available the projected returns on USAID's investment in PACT is expected to be high. One particularly successful subproject alone appears to provide benefits large enough to yield a 12 percent rate of return on the costs of the entire PACT project.

*Sustainability.* The evaluation team considered two questions concerning sustainability. First, will reflows from PACT grantees provide sufficient resources to maintain or enlarge the \$15 million equivalent in PACT's capital base? Second, has the experience of the PACT grant provided the implementing intermediary ICICI with the tools to run such a fund with its own resources?

The PACT project was approved in 1985, the first subgrant was made in 1987, and the first reflows to ICICI began in 1991. There is no repayment experience on which to judge the sustainability of the project. Initial projections of reflows proved optimistic, and the current projection does not estimate recovery of the original funding until 1994-1995. Consequently, the financial return on the project is expected to be quite low. The export subprojects reviewed in the case study appear to be more successful, at least in the near term, than subprojects for domestic production. The export subprojects received 40 percent of total funding but were expected to provide 74 percent of the reflows over the next 2 years.

ICICI staff wants to continue PACT activities after USAID funding ends, and ICICI has already committed its own resources to them. ICICI has gradually learned better selection methods—avoiding computer software firms that stake everything on a new project, reducing emphasis on examining the feasibility of the proposed R&D, and increasing attention to the grantee's capabilities and track record. Detailed examination of proposals was one cause of the long delays in early project approvals. ICICI officials now assume that entrepreneurs with demonstrated capabilities who put half of the funding into a project are the best judges and enforcers of project success.

### *PACT as a Vehicle for Improving Policy*

PACT has also had a positive effect on policy debate within India. It acquired some visibility at its outset because of its close association with Prime Minister Rajiv Gandhi's new technology policy, announced in 1985. Since then, the areas where PACT has been particularly effective—in computer software and biotechnology—have been the sectors in which Indian R&D and export capabilities have been most successfully demonstrated. Although PACT's policy influence on the sector may not have been direct, the project has confirmed the expectation of ICICI Chairman Vaghul, who has played a key role in influencing government policy toward a more market-oriented direction.

Moreover, the trade liberalization process, which began in 1984 with the electronics industry, has gradually spread to wider sectors of the economy. To the extent that PACT grants demonstrated the positive results of liberalization, they contributed to the perception that liberalization was working and should be extended to other sectors.

This indirect approach to trade liberalization may have been more effective than direct approaches. Trade policy liberalization has long been a donor emphasis. USAID advocated eliminating policy barriers to faster growth in the 1960s, and the World Bank—with annual lending of \$2 billion to India—has been pressing India on these issues for the last two decades. But donor pressure has had little apparent effect. As is the case in many countries, the potential political consequences of economic reform have been a strong impediment to change. The PACT project appears to have supplemented such work by providing concrete examples of the potential benefits of better policy.

The evaluation team concluded that the policy environment is the critical factor in export growth and that subsidized service provision is not in itself a particularly effective means to compensate for them. It is clear from the interviews that failures in the market for information were not a serious constraint to exporting by Indian firms. Interventions that attempt to compensate for policy failures are likely to yield only modest results. The PACT project went beyond this by providing resources for sectors (e.g., computers and electronics) where policy was changing; its effect was to reinforce the impact of the policy liberalization.

### *Overall Assessment of PACT*

Overall, the PACT project was a highly successful innovation that demonstrated the potential sustainability of conditional grant funding of R&D in the Indian context. This result may not be applicable to most developing countries, for two reasons. First, ICICI is clearly an extremely well-run institution—quite decentralized and with a strong corporate culture—that makes excellent use of its human resources. Such institutions are the exception in developing countries.

Second, India may present a unique climate for joint R&D. The large numbers of highly trained scientists and engineers that India's excellent higher education system has produced, combined with the country's previous isolation from technological advances in other countries, create an extremely favorable environment for successful innovation. The advantages are partially offset, however, by the difficulties of operating in the constrained Indian environment.

## **CONCLUSIONS**

Overall, the case study confirms that India's highly antiexport policy regime makes it difficult for Indian firms to compete in world markets. It also confirms that substantial entrepreneurial resources are ready to take advantage of openings provided by the Government. Indeed, the limited opening of the economy for computer and electronics exports is causing dramatic growth in Indian competence and exports in those sectors (see box). It appears that over a wide range of sectors, efficient, world-competitive production is actively prevented by government policy.

The CDIE study comes to four conclusions that are relevant for future USAID programming.

- Projects can have significant policy fallout when they demonstrate the benefits of better policy and illuminate directions in which policy should move, as PACT did for indigenous R&D in India. This project showed that linkage to international technology—via ties to firms in developed countries—is essential, rather than harmful, to national R&D.
- Government export promotion activities have been of limited or marginal value. India



has spent large amounts of resources without significant impact. How intervention addresses key constraints facing exporters is more important than whether institutions to support exporters exist.

- At least in the Indian context, there appears to be a significant rationale for intervention based on firms' misperceptions of the risks and rewards of exporting. Companies in a protected environment are insufficiently aware of the potential for sharp increases in productivity from better technology and methods and of the increased profits that such increases would generate.
- High payoffs come from close collaboration between foreign and domestic firms in a repressed economy like India's. The rewards of collaboration come gradually as continual contact takes the firm step by step toward methods, technology, and products that are competitive on world markets.

The fundamental and overriding economic development problem in India is the massive waste of the country's scarce investment resources. Given its capacity to save, India should be growing at 9-10 percent a year. The gross underutilization of India's existing capital stock suggests that capital stock is a vast resource available to increase incomes now, even without additional investment. Thus, the payoff to policies that increase the efficiency of capital in the country should be large and immediate. The challenge for USAID will be to identify paths of economic liberalization, particularly trade liberalization, that will help improve efficiency, while minimizing the adjustment costs that could interfere with political feasibility.

Continued liberalization of the trading regime and of the obstacles to domestic competition are the key vehicles by which this can be accomplished. USAID's role as a marginal donor in India limits its ability to contribute to policy liberalization there. Nevertheless, trade liberalization is so central to the economic welfare of India's population that it warrants concentrating USAID's limited resources on vehicles that show promise of pushing Indian government policy toward the proper direction.

This Evaluation Highlights summarizes the findings from Export Promotion and Investment in India, USAID Technical Report No. 16, PN-AAX-276. The Technical Report can be ordered from the DISC, 1611 North Kent Street, Suite 200, Arlington, VA 22209-2111, telephone (703) 351-4006; fax (703) 351-4039.